

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0380  
CALIBRATION DATE: 23-Sep-11

SBE 38 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.465384e-005  
a1 = 2.767135e-004  
a2 = -2.571709e-006  
a3 = 1.562322e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.50010	849033.7	-1.50009	0.00001
0.99990	757247.0	0.99990	-0.00000
4.49990	647052.8	4.49992	0.00002
8.00000	554727.2	7.99991	-0.00009
11.49990	477105.5	11.49994	0.00004
14.99990	411628.7	14.99994	0.00004
18.49990	356217.1	18.49991	0.00001
21.99990	309174.2	21.99992	0.00002
25.49990	269114.6	25.49986	-0.00004
28.99990	234898.4	28.99986	-0.00004
32.49990	205588.0	32.49994	0.00004

Temperature ITS-90 =  $1/\{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

